



★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS

Risk Limiting Audit

MANUAL

VIRGINIA DEPARTMENT OF ELECTIONS

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1. INTRODUCTION

1.1 Risk-Limiting Audits (RLA)

A RLA is a type of post-election audit that utilizes statistical methods and a manual review of paper ballots to check that the voting equipment accurately reported the correct outcome of an election. RLAs analyze a random sample of hand-counted ballots to confirm election results. If the margin of an election is wide, less votes are audited; if the margin is narrow, more votes will be audited until enough evidence can confirm the results of the contest.¹ Election administrators set the *risk-limit* of the audit; a *risk limit* is the maximum chance that the audit will fail to correct an incorrectly reported outcome. For example, a 10% risk-limit means that there is as a 90% chance that the audit will correct an incorrect outcome. RLAs provide strong statistical evidence that the declared winner of a contest actually received the most votes.

In 2017, the Virginia General Assembly passed legislation that amended the Code of Virginia to include RLAs of ballot scanner machines in use in the Commonwealth. Pursuant to § 24.2-671.1., the changes went into effect on July 1st, 2018. The Code requires that the Department of Elections (ELECT) coordinate a RLA annually adhering to the following guidance:

- An audit will not be conducted until after an election has been certified and the results of the audit will have no effect on the election results.
- The audit will be performed by the local Electoral Board and general registrars in accordance with the procedures outlined in this manual.
- Localities will be selected at random with every locality participating in the Department's annual audit at least once in a five-year period.²
- The local electoral boards shall report the results of the audit to the Department of Elections and the Department will compile a report, which will include a detailed analysis of any detected discrepancies.³

1.2 RLA Notification Process

Pursuant to § 24.2-671.1., RLAs will be conducted after a race has been certified.⁴ If a race has been selected to participate in a RLA, ELECT will notify the corresponding localities via a letter from the Commissioner. The locality will be notified three weeks prior to an audit to allot time to prepare and alert the public of the audit. RLAs will be conducted during a public meeting, pursuant to Va. Code § 2.2-3707.

¹ Risk-Limiting Audits, Postelection Audits, A Summary, <https://www.ncsl.org/research/elections-and-campaigns/risk-limiting-audits.aspx>

² Code of Virginia, § 24.2-671.1. Audits of ballot scanner machines, <https://law.lis.virginia.gov/vacode/title24.2/chapter6/section24.2-671.1/>

³ Code of Virginia, § 24.2-671.1. Audits of ballot scanner machines, <https://law.lis.virginia.gov/vacode/title24.2/chapter6/section24.2-671.1/>

⁴ Code of Virginia, § 24.2-671.1. Audits of ballot scanner machines, <https://law.lis.virginia.gov/vacode/title24.2/chapter6/section24.2-671.1/>

2. AUDIT BASICS

2.1 Audit Software

The Department of Elections currently uses Arlo, an open-source auditing software created by the non-profit organization VotingWorks. The audit software manages the data produced by the audit. The software sets the sample size of the audit, generates a list of randomly selected sample ballots, and calculates all statistical analysis.

2.2 Key Roles

There are four key roles in a RLA: administrators, participants, audit review boards, and the general public.

ELECT will function as the Administrator of the ballot software. As an *Administrator* of the audit software, an ELECT staffer will add elections to be audited, set the *risk-limit*, add participants, input the random seed number into the auditing software, and review the progress of the audit throughout the process. Any questions regarding audit preparation, retrieval, and results should be directed towards this individual or a localities corresponding liaison.

Participants are defined as the general registrar or an appointed person that will be responsible for coordinating the audit and taking on a leadership role during the RLA in their locality. They will be responsible for uploading ballot manifest, entering audit boards, and downloading ballot retrieval lists from the audit software. ELECT will automatically list general registrars as *Participants* in the audit software for each RLA. If additional members of staff or electoral board members need to be added to the participant list, general registrars should send their names and emails to their liaisons. Additional participants must be added before any ballot manifest can be uploaded. Participants **do not** include audit review board members.

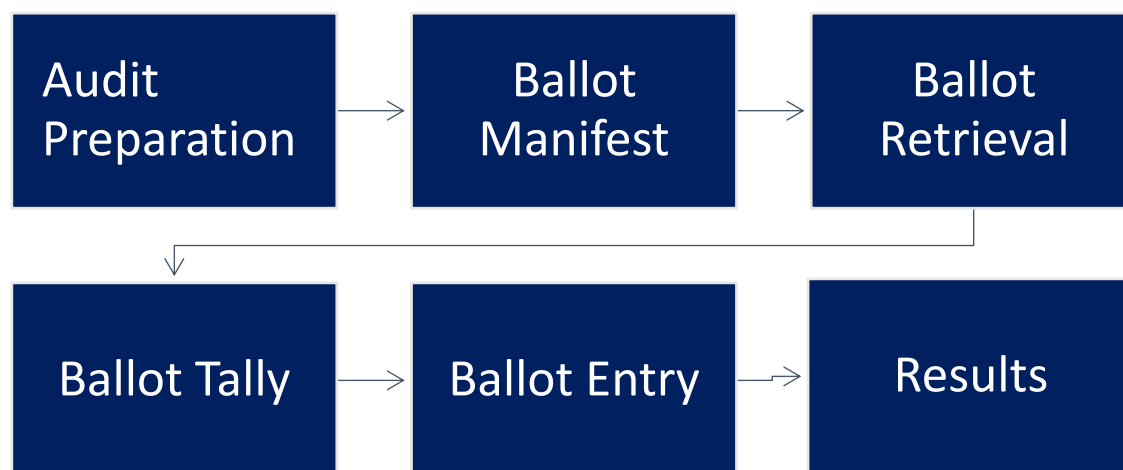
An Audit Review Board(s) plays an essential role in a RLA by retrieving specific ballot(s) and recording the votes for the contest on a tally sheet. The audit board members also input the results of each ballot into the audit software. Each board consists of two people. Localities must appoint at least one audit board per RLA but may choose to have more than one. Guidance on selecting an *Audit Review Board* is detailed in section 3.1.

The General Public will be invited to observe the ballot retrieval and tallying process during a public meeting. This creates transparency and integrity in both the audit and the election process.

2.3 Time Required

Localities should plan for a full day to conduct the audit. This will allow for additional time, if a second round of ballot retrieval is required. Since the sample is random, there is no way to officially determine the amount of ballots a locality may need to retrieve ahead of time. A RLA is designed, however, to sample the least amount of ballots necessary to gain statistical confidence that the outcome of an election is correct; therefore, most RLAs can be completed in one day. As a best practice it is recommended that the public meeting begin in the morning, so the afternoon may be free, if a second round of ballot retrieval is required.

2.4 RLA: Overview



3. AUDIT PREPARATION

3.1 Determining Audit Review Boards

An *Audit Review Board* is a two-person team that retrieves specified ballots, records the results of the ballot, and inputs the results into the ballot software. General registrars and/or the Electoral Boards determine the audit board(s). Audit board members can be: staff, Officers of Election, Electoral Board Members, general registrars, or representatives from each party and/or candidates. Audit boards do not have to declare a party affiliation. As a best practice, it is recommended the audit board consist of one Democrat and one Republican to ensure balanced representation.

The number of *Audit Review Boards* is based off of the number of containers that will need to be opened and not on the number of ballots that need to be retrieved. On average, an audit board can pull 20-25 ballots per hour. If many ballot containers must be retrieved, this average decreases to about 15-20 ballots per hour.

3.2 Submitting an ELECT 659-Request to Inspect Sealed Election Material Form

Pursuant to Va. Code § 24.2-669, a locality must receive permission from the Department of Elections to unseal ballots cast on Election Day for a post-election audit. Localities are required to submit an *ELECT 659-Request to Inspect Sealed Election Material* form to obtain permission. Once submitted, the form is sent to ELECT for signature authorization and then presented to the Clerk of the Circuit Courts in order to access ballots from the election. This form may be found in Forms Warehouse under the Risk-Limiting Audit section.

3.3 Ballot Accounting

Preparing for a RLA is a good time to review ballot accounting practices, which include ballot tracking, ballot reconciliation, and Chain of Custody forms and procedures, in a locality. Ballot accounting forms the basis of a ballot manifest by providing the number of ballots in an envelope/box/container (ballot manifest are explained in greater detail in section **3.6 Creating a Ballot Manifest**.) This information can be found on Ballot Record Reports or on Label #3. ELECT is in the process of designing a new envelope/box label (Label #3) that will include the total number of ballots in a box to aid localities in easily locating this information. These new forms will be available on July 1st, 2021. ELECT has also designed a sample Chain of Custody form to document the control, transfer, and disposition of ballots during a RLA. Localities may choose to utilize this form or design their own to suit their specific needs. This sample form can be found in Forms Warehouse under the Risk-Limiting Audit section. To maintain transparency and the integrity of the RLA, localities should work with their Clerk of Courts to discuss specific questions related to Chain of Custody and the location of the audit.⁵

3.4 Determining Location

In addition to entering the tally results, the facility where an audit takes place must have an internet connection to download and print retrieval lists, placeholder pages, audit board credentials, and labels. If only a few ballots need to be pulled for an audit, a locality may choose to conduct their audit at the courthouse. If more space is needed or if no workspace is available, the audit may take place in another location such as: the general registrar's office, a library, firehouse, school, etc. Localities should work with their Clerk of Courts to consult on the physical space of the audit.

⁵ Democracy Fund, Knowing It's Right, Part Three, Planning and Conducting a Risk-Limiting Audit Pilot, Jennifer Morrell, June 2020,

3.5 Notifying the Public

Pursuant to § 2.2-3707⁶, localities should plan for a public meeting for the day of the audit. The meeting must be published no less than three working days prior to the meeting. Local party chairpersons must also be notified. In addition to local electoral board members, the general registrar, and the Clerk of the Court or his/her designee, meeting attendees include:

- Audit Board Members
- General Public
- Representatives from Political Parties
- Candidates
- Campaign Staff
- Local Party Chairs

3.6 Creating a Ballot Manifest

Virginia utilizes the *ballot-polling method* to conduct RLAs; the *ballot-polling method* manually reviews a random sample of ballots across localities to determine if the overall outcome of an election was correctly reported. In order to select random ballots, participating localities must each upload a ballot manifest. A *ballot manifest* is a two column Excel spreadsheet created by localities that includes a list of the “Batch Name” (Column A) and the “Number of Ballots” (Column B). The ballot manifest creates an inventory of every ballot cast in a locality. Depending on the size of the locality, a ballot manifest should take one hour or less to complete.

	A	B
1	Batch Name	Number of Ballots
2	Pct 101	75
3	Pct 102	112
4	Pct 103	52

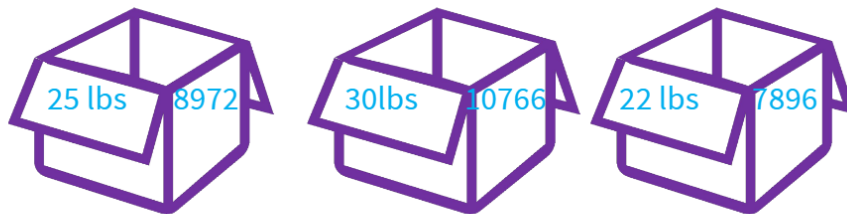
The number of ballots in each batch should be verified independent of the tabulator. The information to create a ballot manifest may be found in the following places:

- Ballot Record Reports from Precincts
- Inventory the ballot boxes at the Clerk of Court. Label #3 should contain the information needed.

⁶ Code of Virginia, § 2.2-3707. Meetings to be public; notice of meetings; recordings; minutes, <https://law.lis.virginia.gov/vacode/title2.2/chapter37/section2.2-3707/>

- Mail-Ins: Voter Credit/History Information
- Calculating the Number of Ballots in a container by weight.
 - If the number of ballots in a specific container is unknown, a locality can perform a simple equation to approximate the number of ballots in each box. To do this, each container box must be weighed. The weight of each box is added together. The total of this sum is then divide by the total number of ballots cast. The result of this equation is then multiplied by the weight of the corresponding box to get the number of ballots (see graphic.)

Calculating Ballots by Weight



Total Weight = 77lbs

Total ballots from vote history/credit = 27,634

$27634 / 77 = 358.88$

Box 1 = $25\text{lb} * 358.88 = 8972$

Box 2 = $30\text{lb} * 358.88 = 10766$

Box 3 = $22\text{lb} * 358.88 = 7895$


Helpful Tips and Reminders:

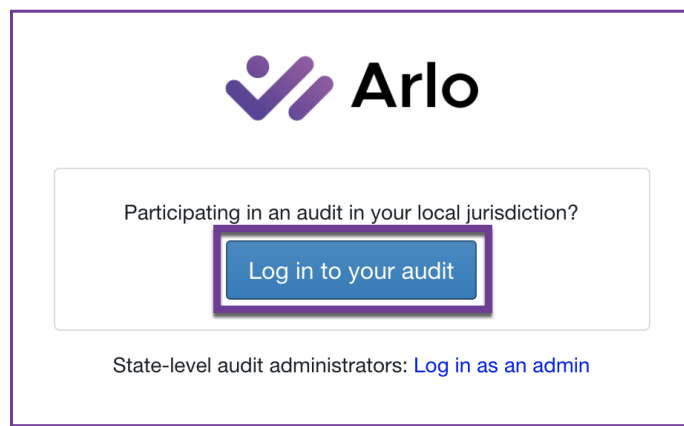
- All types of ballots are included (in person, mail-in, provisional, etc.) in the manifest.
- Localities may label the “Batch Name” in any way that helps keep them organized (example: Precinct 101, Box 26, Container 8, etc.). Batch names are unique to each locality.

- Boxes/Containers/Envelopes that contain large amounts of ballots may be grouped into smaller units to ease the physical challenges of conducting the audit, as long as it is reflected in the batch name (example of “batch names”: Precinct 101 Unit 1; Box 26 Unit 2; Container 8 Unit 3 etc.).
- Keep the spreadsheet simple; avoid color coding and bold, so the ballot auditing software can read it.
- Run a quick equation in excel to check that all ballots have been accounted for in a locality. After performing this check, make sure to **delete** this sum before uploading the manifest into the audit software.
- Build a ballot manifest as the ballots are being stored after an election in preparation of future audits.
- ELECT staff is available to troubleshoot specific challenges and provide support.

3.7 Uploading a Ballot Manifest

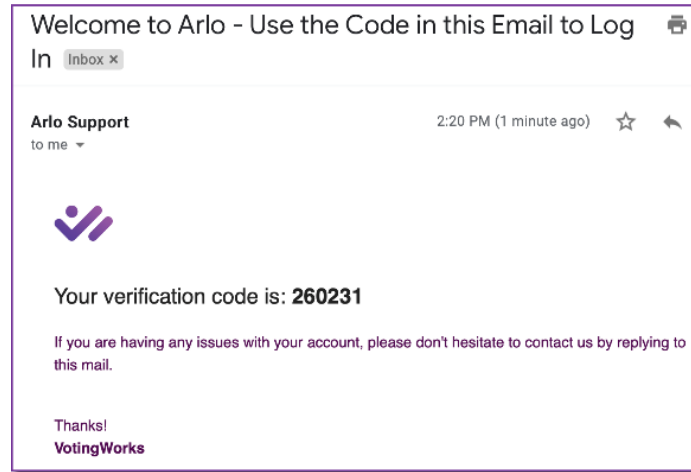
Once the ballot manifest is created, participants will save the manifest as a **.csv file** (CSV UTF-8, CSV (Macintosh) or CSV (MS-DOS) are all acceptable) and upload the spreadsheet into the auditing software. The audit software will let participants know if a mistake has been made when creating or uploading the manifest by generating an error message. Mistakes can include: empty rows, incorrect file formats (the manifest must be saved as a .csv file), or ballot totals in any rows or columns. All ballot manifests must be submitted by all participating localities to start the audit. Once the software receives all of the ballot manifests, it will compile them into one large ballot list. This master list will be used to select random ballots across participating localities. Detailed instructions, on how to upload a ballot manifest into the current auditing software, are listed below:

1. Using Google Chrome  or Safari as your browser, go to this link: <https://arlo.voting.works>
2. Click Log in to your audit



3. Enter email address.

4. Check your email for a new email with a subject “Welcome to Arlo - Use the Code in this Email to Log In” - enter the verification code.



5. Click on the button with the locality name.



6. Click the Browse button and navigate to the ballot manifest .csv file that was created. Once selected, click Upload File.



The audit has not started.

Ballot manifest not uploaded.

Audit Source Data

Ballot Manifest

Click "Browse" to choose the appropriate Ballot Manifest file from your computer. This file should be a comma-separated list of all the ballot boxes/containers used to store ballots for this particular election, plus a count of how many ballot cards (individual pieces of paper) are stored in each container.

(Click [here](#) to view a sample file in the correct format.)

- When the upload is successful, a message will appear at the top of the screen that says "Ballot manifest uploaded." If a mistake is found after a ballot manifest has been uploaded, participants have the option to log back in and use the **Replace File** button to update the file.



The audit has not started.

Ballot manifest uploaded.

Waiting for Audit Administrator to launch audit.

Audit Source Data

Ballot Manifest

Click "Browse" to choose the appropriate Ballot Manifest file from your computer. This file should be a comma-separated list of all the ballot boxes/containers used to store ballots for this particular election, plus a count of how many ballot cards (individual pieces of paper) are stored in each container.

[\(Click here to view a sample file in the correct format.\)](#)

Current Ballot Manifest file: Oceana ballot manifest - Oceana ballot manifest - Oceana ballot manifest - Oceana ballot manifest.csv

Replace File

8. Once the steps for uploading your ballot manifest have been completed, log out before exiting the screen.

3.6 Suggested Supplies

While not required, the following is a list of helpful supplies for a successful audit:

- Table and chairs for each audit board
- Bright colored paper
- Bright colored removable labels
- Tally sheets
- Pens
- Rubber fingers
- Device to open containers
- Materials to reseal containers, if necessary
- Device with Wi-Fi/cellular to enter ballot tallies (laptop, smartphone, etc.)
- 20, 10 sided-dice (ELECT has a pair of dice that localities may borrow.)
- Printer

4. The Public Meeting


4.1 Generating a Random Seed Number

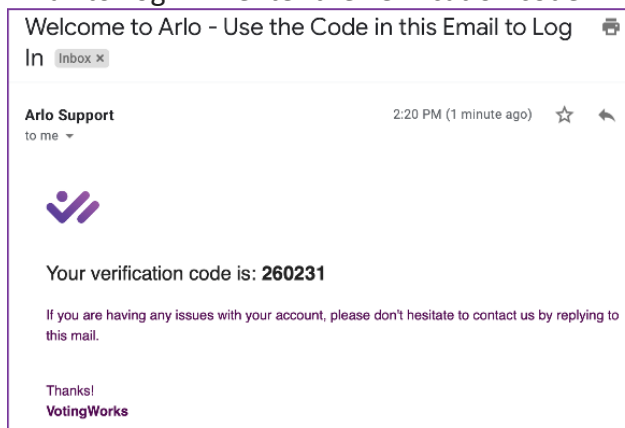
The audit software uses a 20-digit random seed number to select ballots to be retrieved. A random seed number specifies the starting point of a computer generated random sequence of numbers. To create this random number, a designated person(s) will roll a ten-sided dice twenty times and record each number. This step is done before ballot retrieval and during the public meeting. Any person in attendance may be designated to roll the dice, it can be done by one person or several people. The number generated by this activity will be inputted into the audit software by the audit *Administrator*. Once this number is inputted, the auditing software will randomly select and generate a list of ballots to be retrieved based on the sample size. For an illustrated example of this process, please review the *Random Seed Number Generation* video on Virginia Department of Elections' YouTube channel.⁷

4.2 Ballot Retrieval Process

4.2.1 Log In to Audit Software

Once the list of ballots to be audited has been generated by the audit software, participants will log into the audit software to review the list of ballots they must retrieve to complete the audit.

1. Using Google Chrome  or Safari as your browser, go to this link: <https://arlo.voting.works>
2. Click Log in to your audit.
3. Enter email address.
4. Check your email for a new email with a subject "Welcome to Arlo - Use the Code in this Email to Log In" - enter the verification code.

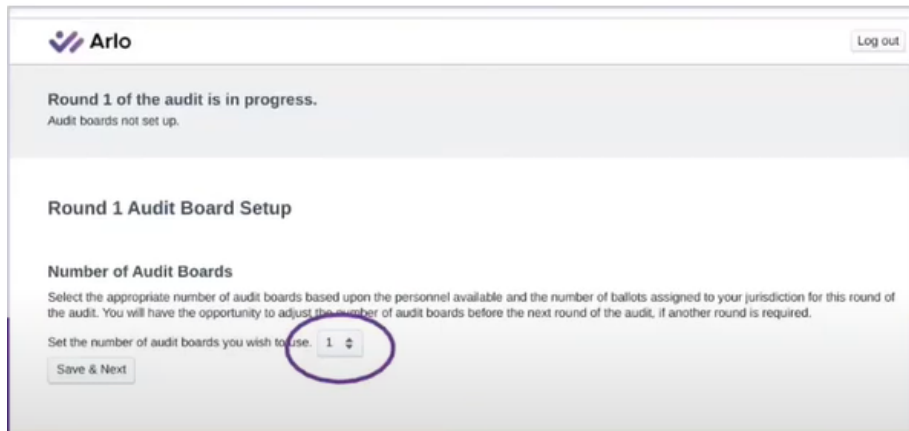


5. Click on the button with the locality name.

⁷ Virginia Department of Elections YouTube Channel, Random Seed Number Generation, <https://www.youtube.com/watch?v=Jw1DaJGxvxQ&t=208s>

4.2.2 Audit Boards

The audit software will ask how many audit boards will be participating in the audit. Since the selection of ballots is random, a locality will have to conservatively estimate the number of audit review boards they deem necessary based on the size of their locality and the race being audited.



Arlo

Log out

Round 1 of the audit is in progress.
Audit boards not set up.

Round 1 Audit Board Setup

Number of Audit Boards

Select the appropriate number of audit boards based upon the personnel available and the number of ballots assigned to your jurisdiction for this round of the audit. You will have the opportunity to adjust the number of audit boards before the next round of the audit, if another round is required.

Set the number of audit boards you wish to use. 1

Save & Next

4.2.3 Download and Print

The audit software will sort ballot retrieval lists, placeholder sheets, ballot labels, and audit board credentials for every audit board. Print each item for each audit board.

TEST RLA ELECTION - April 8, 2021





Round 1 of the audit is in progress.

1 of 1 audit boards complete.

Waiting for all jurisdictions to complete Round 1.

Round 1 Data Entry

0 ballots to audit in Round 1

 Download Aggregated Ballot Retrieval List
 Download Placeholder Sheets
 Download Ballot Labels
 Download Audit Board Credentials

Audit Board Progress

0 of 0 ballots audited



Audit Board #1: no ballots to audit

- **Ballot Retrieval List:** A ballot retrieval list is a list of ballots to be retrieved by a locality. The “Batch Name” will be the naming convention used in the ballot manifest. Since the selection is random, precincts may have multiple ballots to be retrieved and some precincts may have none.

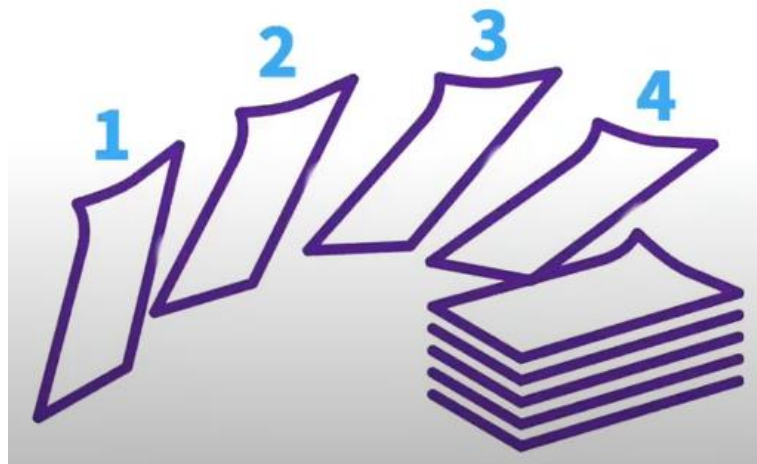
	A	B
1	Batch Name	Ballot Number
2	Precinct 1	90
3	Precinct 2	2
4	Precinct 2	197
5	Precinct 4	27
6	Precinct 5	313
7	Precinct 5	578
8	Precinct 5	587

- The ballot number reflects the numerical order of a specific ballot. In order to audit ballot number 90 in Precinct 1, for example, a member of the audit board must count each stored ballot until they reach the 90th ballot in the batch.
- **Placeholder sheets:** Placeholder sheets are individual sheets that contain each batch name and number (ex. Precinct 1, Ballot Number 90). They come in the form of a pdf and are printed on brightly colored paper. These sheets will be used to mark the place of the ballot that is being retrieved in the stack of ballots.

- **Ballot Labels:** Ballot Labels should be placed on ballots when retrieved. A bright colored removable label is recommended but not required.
- **Audit Board Credentials for Data:** The audit software will create a username and password for the audit board members. The link at the bottom of the audit board credentials or QR code will direct audit board members to the site to enter in the ballot totals.

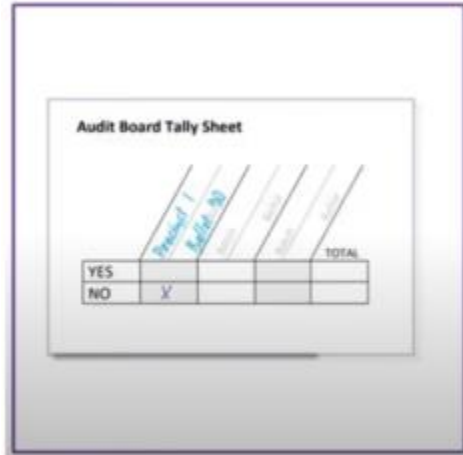
4.2.4 Retrieving and Tallying Ballots

- 1) Review list of ballots, retrieve the necessary containers.
- 2) Perform any Change of Custody that may be required by the Clerk of Court. Chain of Custody needs to be documented. ELECT has a sample form that may be used to document Chain of Custody or a locality may design their own form.
- 3) Remove ballots from box and place in a neat stack.
- 4) Review *Ballot Retrieval List* to determine what ballot to select.
- 5) Starting at the top of the stack, count ballots until the desired ballot is reached.



- 6) Once the ballot needed to be retrieved is reached, pull it out of the stack and insert the placeholder sheet in the stack to mark its position. Place the removable label on the ballot. The placeholder sheets and ballot labels are generated by the audit software.
- 7) Once all ballots have all been pulled from the containers, the audit board will use the procedures established by ELECT for conducting hand counts of ballots.⁸These procedures are outlined in Forms Warehouse under Election Management, Election Day Instruction and Forms, *Hand Counting-Ballots-Examples*. Include the batch name, ballot number, and the vote on the tally sheet. ELECT has sample tally sheets available for use during a RLA but a locality may choose to create their own.

⁸ Virginia Department of Elections, Commonwealth of Virginia, Ballot Examples, Hand Counting Printed Ballots for Virginia Elections or Recounts, <https://www.elections.virginia.gov/media/formswarehouse/election-management/election-day-instructions-and-forms/ELECT-Management-Handcounting-Ballots-Examples.pdf>



- 8) Localities may return ballot(s) to the appropriate container(s) or keep all the ballots from the RLA in a designated envelope/container.
- 9) The containers should be resealed and returned to the Clerk of the Circuit Courts following the Chain of Custody procedures.

Helpful Tips and Reminders:

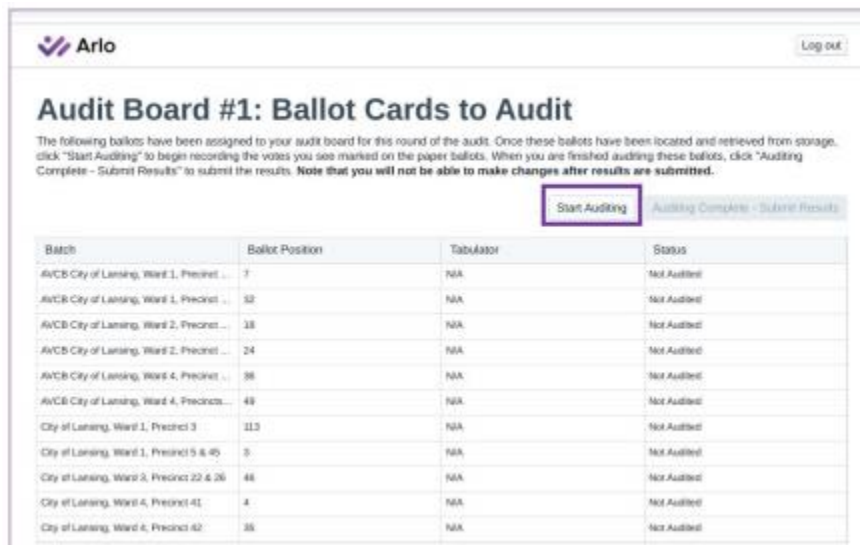
- ELECT has a limited number of counting scales to loan. Localities may send an email to their liaison to request use of a scale.
- ELECT has sample Chain of Custody forms and Tally Sheets available for use in Forms Warehouse.

4.3 Ballot Entry into the Audit Software

The link and/or QR code found at the bottom of the audit board credentials will take audit board members to the data entry portal to input the results of the audit. A device with a Wi-Fi connection is needed to record the paper tally sheet. This may include a laptop or a smartphone. If using a smartphone, scan the QR code or type in the URL into the web browser.



- 1) The audit board members will be prompted to sign-in. The audit board will see the list of ballots. Audit board members will “key-in” results from the list of ballots. If a locality has 22 ballots to retrieve, there will be 22 separate fields to record each ballot. ELECT recommends both audit board members participate with one audit board member reading the results and one audit board member entering the results. Audit board members must **both** agree on the results of each ballot.
- 2) Click the **Start Auditing** button to begin.



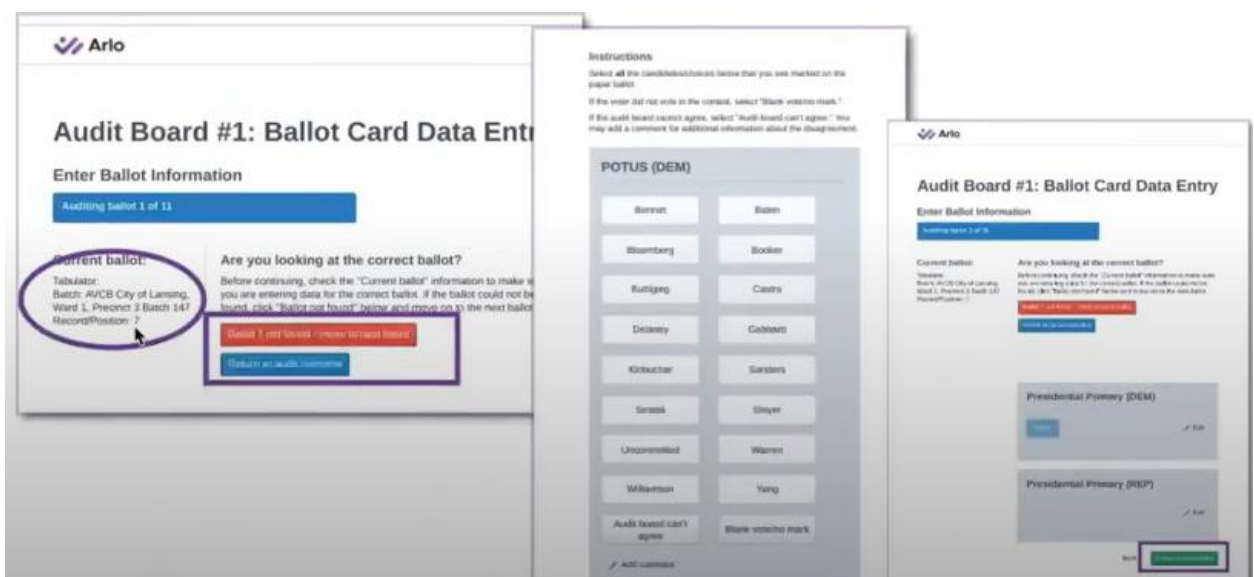
Audit Board #1: Ballot Cards to Audit

The following ballots have been assigned to your audit board for this round of the audit. Once these ballots have been located and retrieved from storage, click "Start Auditing" to begin recording the votes you see marked on the paper ballots. When you are finished auditing these ballots, click "Auditing Complete - Submit Results" to submit the results. **Note that you will not be able to make changes after results are submitted.**

[Start Auditing](#) [Auditing Complete - Submit Results](#)

Batch	Ballot Position	Tabulator	Status
AVCB City of Lansing, Ward 1, Precinct ...	7	N/A	Not Audited
AVCB City of Lansing, Ward 1, Precinct ...	32	N/A	Not Audited
AVCB City of Lansing, Ward 2, Precinct ...	38	N/A	Not Audited
AVCB City of Lansing, Ward 2, Precinct ...	24	N/A	Not Audited
AVCB City of Lansing, Ward 4, Precinct ...	36	N/A	Not Audited
AVCB City of Lansing, Ward 4, Precinct ...	49	N/A	Not Audited
City of Lansing, Ward 1, Precinct 3	113	N/A	Not Audited
City of Lansing, Ward 1, Precinct 5 & 45	5	N/A	Not Audited
City of Lansing, Ward 3, Precinct 22 & 26	46	N/A	Not Audited
City of Lansing, Ward 4, Precinct 41	4	N/A	Not Audited
City of Lansing, Ward 4, Precinct 42	35	N/A	Not Audited

- 3) Go through the ballots in order.
- 4) Select the candidate marked on the ballot, both audit board members need to agree with the results. Click Review. Verify accuracy before clicking Submit & Next Ballot button.



Audit Board #1: Ballot Card Data Entry

Enter Ballot Information

Auditing ballot 1 of 11

Current ballot:

Tabulator:
Batch: AVCB City of Lansing, Ward 1, Precinct 3 Batch 147
Record/Position: 7

Are you looking at the correct ballot?

Before continuing, check the "Current ballot" information to make sure you are entering data for the correct ballot. If the ballot could not be found, click "Ballot not found" below and move on to the next ballot.

[Ballot 1 not found. Please go to next ballot.](#)

[Submit to Arlo audit system](#)

Instructions

Select all the candidates/boxes below that you see marked on the paper ballot.

If the voter did not vote in the contest, select "Blank white box mark."

If the audit board member agrees, select "Audit board can't agree," this may add a comment for additional information about the disagreement.

POTUS (DEM)

Barnett	Biden
Bloomberg	Booker
Buitrago	Castro
Delaney	Gabbard
Klobuchar	Sanders
Smith	Steyer
Uncommitted	Warren
Wildeberger	Yang
Audit board can't agree	Blank white box mark

[Add comment](#)

Audit Board #1: Ballot Card Data Entry

Enter Ballot Information

Auditing ballot 1 of 11

Current ballot:

Tabulator:
Batch: AVCB City of Lansing, Ward 1, Precinct 3 Batch 147
Record/Position: 7

Are you looking at the correct ballot?

Before continuing, check the "Current ballot" information to make sure you are entering data for the correct ballot. If the ballot could not be found, click "Ballot not found" below and move on to the next ballot.

[Ballot 1 not found. Please go to next ballot.](#)

[Submit to Arlo audit system](#)

Presidential Primary (DEM)

[Vote](#) [/ 30](#)

Presidential Primary (REP)

[Vote](#) [/ 30](#)

[Submit](#)

- 5) When all ballots have been inputted, audit boards should return to the audit overview screen to verify every ballot has been entered into the audit software. Once everything has been verified, click the **“Auditing Complete-Submit Results”** button.

Audit Board #1: Ballot Cards to Audit

The following ballots have been assigned to your audit board for this round of the audit. Once these ballots have been located and retrieved from storage, click "Start Auditing" to begin recording the votes you see marked on the paper ballots. When you are finished auditing these ballots, click "Auditing Complete - Submit Results" to submit the results. **Note that you will not be able to make changes after results are submitted.**

[Start Auditing](#) [Auditing Complete - Submit Results](#)

Batch	Ballot Position	Tabulator	Status	
AvCB City of Lansing, Ward 1, Precinct ...	7	N/A	Audited	Re-audit
AvCB City of Lansing, Ward 1, Precinct ...	32	N/A	Audited	Re-audit
AvCB City of Lansing, Ward 2, Precinct ...	18	N/A	Audited	Re-audit
AvCB City of Lansing, Ward 2, Precinct ...	24	N/A	Audited	Re-audit
AvCB City of Lansing, Ward 4, Precinct ...	36	N/A	Audited	Re-audit
AvCB City of Lansing, Ward 4, Precincts...	49	N/A	Audited	Re-audit
City of Lansing, Ward 1, Precinct 3	113	N/A	Audited	Re-audit
City of Lansing, Ward 1, Precinct 5 & 45	3	N/A	Audited	Re-audit
City of Lansing, Ward 3, Precinct 22 & 26	46	N/A	Audited	Re-audit
City of Lansing, Ward 4, Precinct 41	4	N/A	Audited	Re-audit
City of Lansing, Ward 4, Precinct 42	35	N/A	Audited	Re-audit

- 6) Audit board members will sign-off. Names must be keyed in exactly how the audit board member signed-in. For example, if the caps lock was on when the audit board member signed in, then the caps lock must be on when the audit board member signs out.

Audit Board #1: Board Member Sign-off

Thank you for completing the ballots assigned to your Audit Board. Please sign your name below to confirm that all ballots were audited to the best of your ability and in accordance with the appropriate state statutes and guidelines.

If another round of auditing is needed, you will be notified by election officials.

Audit Board Member: RACHEL LAWLESS

Full Name

Audit Board Member: rachel lawless

Full Name

[Sign Off](#)

4.4 Completion of Audit

When all audit boards have completed their ballot entry and the risk limit has been met, the *Audit Progress* screen will display the message “Congratulations - the audit is complete!”

If the risk limit was not met after all the ballots have been audited, the audit software will initiate another round of sampling. A new ballot retrieval list, placeholders, labels, and audit board credentials will be generated for an additional round of ballot retrieval.

Audit Completion

Completed

The screenshot shows the 'Arlo' interface with a navigation bar containing 'Audit Setup', 'Audit Progress', 'View Audits', 'New Audit', and 'Log out'. A purple-bordered box at the top contains the message 'Congratulations - the audit is complete!' and a green 'Download Audit Report' button. Below this, the 'Audit Progress' section is active, displaying a table titled 'Audit Progress by Jurisdiction'.

Jurisdiction Name	Status	Total Audited	Remaining in Round
Kalamazoo County	Complete	0	0
Kalamazoo County	Complete	0	0
Kalamazoo County	Complete	0	0
Kalamazoo County	Complete	0	0

Additional
Sampling

The screenshot shows the 'Arlo' interface with a navigation bar containing 'Audit Setup', 'Audit Progress', 'View Audits', 'New Audit', and 'Log out'. A purple-bordered box at the top contains the message 'Round 2 of the audit is complete - another round is needed' and a green 'Start Round 3' button.

4.5 Results

At the conclusion of the audit, ELECT will submit a report to the State Board of Elections on the findings of the RLA. The report will include the results of the audit as well as an analysis of any detected discrepancies. If a locality would like to send a press release to local news outlets, ELECT has created a sample press release template that localities may utilize. This press release is found on the Risk Limiting Audit section in Forms Warehouse.

5. APPENDIX

5.1 Code

5.1.1 § 24.2-671.1. Audits of ballot scanner machines.

A. The Department of Elections shall coordinate a post-election risk-limiting audit annually of ballot scanner machines in use in the Commonwealth. The localities selected for the audit shall be chosen at random with every locality participating in the Department's annual audit at least once during a five-year period. The purpose of the audits shall be to study the accuracy of ballot scanner machines.

B. No audit conducted pursuant to this section shall commence until after the election has been certified and the period to initiate a recount has expired without the initiation of a recount. An audit shall have no effect on the election results.

C. All audits conducted pursuant to this section shall be performed by the local electoral boards and general registrars in accordance with the procedures prescribed by the Department. The procedures established by the Department shall include its procedures for conducting hand counts of ballots. Candidates and political parties may have representatives observe the audits.

D. The local electoral boards shall report the results of the audit of the ballot scanner machines in their jurisdiction to the Department. At the conclusion of each audit, the Department shall

submit a report to the State Board. The report shall include a comparison of the audited election results and the initial tally for each machine audited and an analysis of any detected discrepancies.

2008, c. [565](#); 2014, cc. [540](#), [576](#); 2017, c. [367](#).

5.1.2 § 24.2-669. Clerk to keep ballots; inspection; destruction.

The clerk to whom the counted and uncounted ballots are delivered shall, without breaking the seal, deposit them in a secure place in his office, where they shall be kept for the time required by this section. He shall not allow the ballots to be inspected except (i) by an authorized representative of the State Board or by the electoral board at the direction of the State Board to ensure the accuracy of the returns or the purity of the election, (ii) by the officers of election, and then only at the direction of the electoral board in accordance with § [24.2-672](#) when the provisions of § [24.2-662](#) have not been followed, (iii) on the order of a court before which there is pending a proceeding for a contest or recount under Chapter 8 (§ [24.2-800](#) et seq.) of this title or before whom there is then pending a proceeding in which the ballots are necessary for use in evidence, or (iv) for the purpose of conducting an audit as part of a post-election pilot program pursuant to § [24.2-671.1](#). In the event that ballots are inspected under clause (i), (ii), or (iv) of this paragraph, each political party and each independent candidate on the ballot, or each primary candidate, shall be entitled to have a representative present during such inspection. The representatives and observers lawfully present shall be prohibited from interfering with the officers of election in any way. The State Board or local electoral board shall provide such parties and candidates reasonable advance notice of the inspection.

After the counted ballots for a federal election have remained in the clerk's office for two years, if no election contest or other proceeding is pending in which such ballots may be needed as evidence, the clerk shall destroy such ballots. After the counted ballots for any other election have remained in the clerk's office for one year, if no election contest or other proceeding is pending in which such ballots may be needed as evidence, the clerk shall destroy such ballots. After the unused ballots have remained in the clerk's office and the time has expired for initiating a recount, contest, or other proceeding in which such ballots may be needed as evidence and no such contest or proceeding is pending, the clerk may then destroy the unused ballots other than punchcard ballots, which shall be returned to the electoral board.

Code 1950, §§ 24-268, 24-270; 1970, c. 462, § 24.1-144; 1973, c. 30; 1975, c. 515; 1978, c. 778; 1981, c. 425; 1992, c. 293; 1993, c. 641; 1998, c. [270](#); 2003, c. [1015](#); 2006, c. [689](#); 2008, c. [565](#).

5.1.3 § 2.2-3707. Meetings to be public; notice of meetings; recordings; minutes.

A. All meetings of public bodies shall be open, except as provided in §§ [2.2-3707.01](#) and [2.2-3711](#).

B. No meeting shall be conducted through telephonic, video, electronic or other electronic communication means where the members are not physically assembled to discuss or transact public business, except as provided in § 2.2-3708.2 or as may be specifically provided in Title 54.1 for the summary suspension of professional licenses.

C. Every public body shall give notice of the date, time, and location of its meetings by:

1. Posting such notice on its official public government website, if any;
2. Placing such notice in a prominent public location at which notices are regularly posted; and
3. Placing such notice at the office of the clerk of the public body or, in the case of a public body that has no clerk, at the office of the chief administrator.

All state public bodies subject to the provisions of this chapter shall also post notice of their meetings on a central, publicly available electronic calendar maintained by the Commonwealth. Publication of meeting notices by electronic means by other public bodies shall be encouraged.

The notice shall be posted at least three working days prior to the meeting.

D. Notice, reasonable under the circumstance, of special, emergency, or continued meetings shall be given contemporaneously with the notice provided to the members of the public body conducting the meeting.

E. Any person may annually file a written request for notification with a public body. The request shall include the requester's name, address, zip code, daytime telephone number, electronic mail address, if available, and organization, if any. The public body receiving such request shall provide notice of all meetings directly to each such person. Without objection by the person, the public body may provide electronic notice of all meetings in response to such requests.

F. At least one copy of the proposed agenda and all agenda packets and, unless exempt, all materials furnished to members of a public body for a meeting shall be made available for public inspection at the same time such documents are furnished to the members of the public body. The proposed agendas for meetings of state public bodies where at least one member has been appointed by the Governor shall state whether or not public comment will be received at the meeting and, if so, the approximate point during the meeting when public comment will be received.

G. Any person may photograph, film, record or otherwise reproduce any portion of a meeting required to be open. The public body conducting the meeting may adopt rules governing the placement and use of equipment necessary for broadcasting, photographing, filming or recording a meeting to prevent interference with the proceedings, but shall not prohibit or otherwise prevent any person from photographing, filming, recording, or otherwise reproducing any portion of a meeting required to be open. No public body shall conduct a meeting required to be open in any building or facility where such recording devices are prohibited.

H. Minutes shall be recorded at all open meetings. However, minutes shall not be required to be taken at deliberations of (i) standing and other committees of the General Assembly; (ii) legislative interim study commissions and committees, including the Virginia Code Commission; (iii) study committees or commissions appointed by the Governor; or (iv) study commissions or


study committees, or any other committees or subcommittees appointed by the governing bodies or school boards of counties, cities and towns, except where the membership of any such commission, committee or subcommittee includes a majority of the governing body of the county, city or town or school board.

Minutes, including draft minutes, and all other records of open meetings, including audio or audio/visual records shall be deemed public records and subject to the provisions of this chapter.

Minutes shall be in writing and shall include (a) the date, time, and location of the meeting; (b) the members of the public body recorded as present and absent; and (c) a summary of the discussion on matters proposed, deliberated or decided, and a record of any votes taken. In addition, for electronic communication meetings conducted in accordance with § 2.2-3708.2, minutes of state public bodies shall include (1) the identity of the members of the public body at each remote location identified in the notice who participated in the meeting through electronic communication means, (2) the identity of the members of the public body who were physically assembled at the primary or central meeting location, and (3) the identity of the members of the public body who were not present at the locations identified in clauses (1) and (2) but who monitored such meeting through electronic communication means.


1968, c. 479, § 2.1-343; 1973, c. 461; 1976, c. 467; 1977, c. 677; 1982, c. 333; 1989, c. 358; 1990, c. 538; 1993, c. 720; 1995, c. [562](#); 1999, cc. [696](#), [703](#), [726](#); 2000, c. [227](#); 2001, c. [844](#); 2004, cc. [730](#), [768](#); 2005, c. [352](#); 2007, c. [300](#); 2009, c. [628](#); 2010, c. [309](#); 2015, c. [131](#); 2017, c. [616](#); 2018, c. [55](#).


5.2 ELECT 659-Request to Inspect Sealed Election Material




★ VIRGINIA ★
DEPARTMENT *of* ELECTIONS


ELECT 659 - Request to Inspect Sealed Election Materials

Election Date: *


Election Type: *


Date of Request: *



Name of Requester *

Position *


Email Address *

Phone Number *

Confirm Email Address *


Locality *


Precinct Name *

Precinct #: *

Specific Envelope which needs to be inspected:

The Envelope needs to be inspected to determine:

Powered by  formsite

Submit

5.3 RLA Chain of Custody Log

RLA Chain of Custody Log

Jurisdiction Name:

Election Date: _____

Audit

Date(s): _____

Date	Name (Please sign)	Title	Precinct Box/Envelope being checked out or back in	Time Out	Time In

5.4 Tally Sheet

RISK-LIMITING AUDIT TALLY SHEET

Total Ballots Audited: _____

Audit Date: _____

Office	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	Batch	Ballot#	TOTAL
CANDIDATE																			0
Mickey																			0
Minnie																			0
Goofy																			0
Write-In:																			0
Over Votes:																			
Under Votes:																			

5.5 Sample Press Release

[For Immediate Release (unless embargoed)]

[Organization Name]

[Date]

[Headline, use Times New Roman or Arial font]

[Insert Sub header, Keep font sizes standard, and 1 point apart in size. For example, if your headline is 14, your sub header should be 13, and your body should be 12]

[CITY] – Provide general news release content. For example, begin by naming official who announced the results and summarize the results.

Here you can include 1-2 paragraphs explaining some of the details about the audit.

[Quote from the Director of Elections/General Registrar]

Include any additional information or resources related to the audit, which can include links to the audit report, voter registration website, etc.

Media Contact:

[Name]

[Job Title]

[Email address]

[Phone number]

[Website]

###

5.6 Glossary

Risk-Limiting Audit: a type of post-election audit that utilizes statistical methods and a manual review of paper ballots to check that the voting equipment accurately reported the correct outcome of an election.

Risk-Limit: the maximum chance that the audit will fail to correct an incorrectly reported outcome. For example, a 10% risk limit means there is a 90% chance that the audit will correct an incorrectly reported outcome.

Administrator: a member of ELECT staff that adds elections to be audited, sets the risk-limit, adds participants, inputs the random seed number, and reviews the progress of the RLA.

Participants: a general registrar or appointed person that will be responsible for coordinating the audit in their locality. Participants are responsible for uploading a ballot manifest, entering audit review boards, and downloading ballot retrieval lists from the audit software.

Audit Review Boards: a two-person team that retrieves specific ballots, records the results on a tally sheet, and uploads the results into the auditing software.

Ballot Polling: one of two methods for conducting RLA's that relies on manually reviewing a random sample of ballots across localities to determine if the overall outcome of an election was correctly reported.

Ballot Manifest: a two-column Excel spreadsheet that creates an inventory of every ballot cast in a locality during a contest.